

What is claimed is:

1. An economical method of making spin blanks greater than a predetermined size, comprising:
providing at least two pieces of material having abutting edges;
friction stir welding the two pieces together along the abutting edges to form a
5 blank; and
spin forming the blank into a desired article.
2. The method as recited in Claim 1, wherein any number and size of material pieces are joined by friction stir welding to provide the required blank size.
3. The method as recited in Claim 1, wherein the material pieces are an aluminum alloy.
4. The method as recited in Claim 3, wherein the material pieces comprise sheet having a thickness of 0.030 inches (0.762 mm) or greater.
5. The method as recited in Claim 3, wherein the material pieces comprise plate having a thickness of 0.250 inches or greater to a maximum thickness that can be friction stir welded.
6. The method as recited in Claim 1, wherein the blank is annealed after friction stir welding, prior to spinning.
7. The method as recited in Claim 1, wherein the material pieces are friction stir welded in any heat treat condition to a maximum size of available annealing ovens that will accommodate a circular blank.

8. The method as recited in Claim 7, wherein the blank is annealed after friction stir welding and prior to spinning.
9. The method as recited in Claim 1, wherein the material pieces are friction stir welded in the annealed temper and the blank spun with the joint in the as-welded condition.
10. The method as recited in Claim 1, wherein special heat treatments are applied at the beginning, intermediate prior to completing the spinning operation, or prior to application of solution heat treatments.
11. The method as recited in Claim 1, wherein said at least two pieces comprise plates, and said blank has a diameter greater than 209 inches.
12. The method as recited in Claim 1, wherein said at least two pieces comprise sheets, and said blank has a width greater than 139 inches.